



SERVOTECH INDIA LIMITED

**YOUR TRUSTED PARTNER
IN EDIBLE OIL PROCESSING**



TURNKEY SOLUTION

ABOUT US

SERVOTECH – Trusted for Over 58+ Years!

Servotech India Ltd. has been successfully providing absolute solutions for oilseed processing plants across the country. Aided by innovation and field knowledge, we have been consistently pushing our technology frontiers to meet the challenging demands of the edible oil industry in order to improve the efficiency and feasibility of the plants.

Our core strength and specialization lies in undertaking projects, which includes services right from concept to commissioning and beyond. We design, manufacture and supply projects for Solvent Extraction Plants, Vegetable Oil Refining Plants, Cattle / Poultry Feed Plant, Dry Lecithin & Lecithin Powder Plant, Cotton Seed Processing Plants, Herbal Extraction Plants / Instant Tea Extraction Plants / Dry Fractionation Plants, Vanaspati / Hydrogenation Plants, Oil Seed Crushing and many more.

Servotech India Ltd. has been certified with ISO: 9001-2015 for following a Standard Quality Management System and has been recognized as a prominent export house by the Government of India.



**58+ Years of
Trusted Excellence**



**400+ Global Projects
Delivered**



**Expertise in Oilseed
Processing**



**ISO 9001:2015 Certified
Company**



**End-to-End Project
Execution**



**Quality, Performance &
Global Support**

History Of Servotech India

Our Journey in Pioneering Industrial Solutions



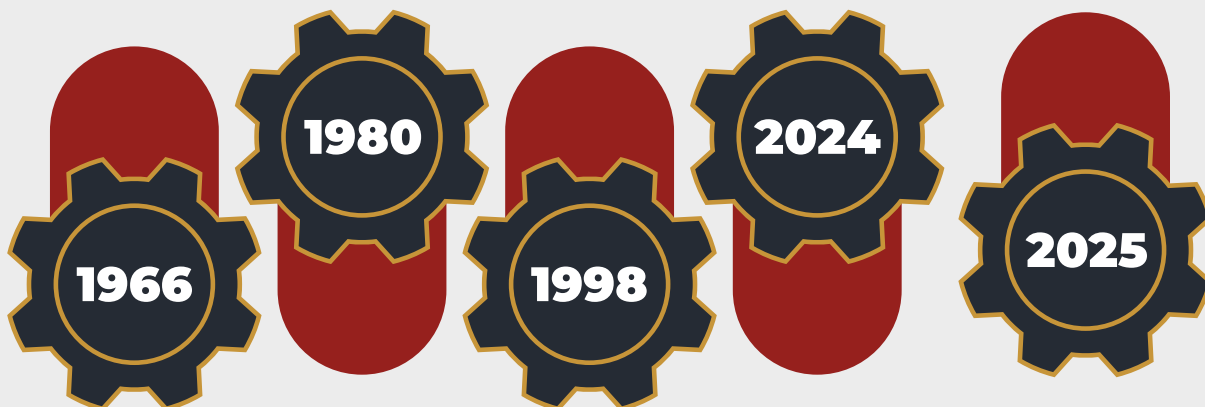
Introduced Desolventiser Toaster

Servotech became the first in India to introduce and manufacture the Desolventiser Toaster, revolutionizing solvent extraction processes with automated, high-quality equipment.



Global Expansion and Innovation

Expanded overseas projects in the dairy and refrigeration sectors, serving clients in Ivory Coast and UAE, while continuing to innovate with energy-saving and computerized monitoring technologies.



Foundation of Servotech India

Servotech India Limited was established, becoming a pioneer in designing and manufacturing solvent extraction and vegetable oil refining plants, setting the stage for over five decades of innovation in the edible oil industry.



ISO 9001:2008 Certification

Achieved ISO 9001:2008 certification, implementing a robust three-stage quality control system to ensure excellence in raw material, in-process, and final product testing.



ISO 9001:2015 Certification

Achieved ISO 9001:2015 certification, implementing a robust three-stage quality control system to ensure excellence in raw material, in-process, and final product testing.

Founders



Radheshyam Lahoti

Managing Director



Murli Lahoti

Director

Why Servotech?

Servotech continues to lead the industry by offering **cutting-edge technologies and plant solutions**, including:

1. **Desolventizer Toaster cum Dryer Cooler (DTDC)**
2. **Flash Desolventization System (FDS)** for Soybean
3. **Mega-Capacity Solvent Extraction & Vegetable Oil Refining Plants**
4. **Supercritical Fluid Extraction Systems**
5. **Micro Milling of Soya Meal** for downstream value-added products
6. **Lecithin De-oiling & Lecithin Powder Plants**
7. **Specialty Derivative Plants from Castor Oil.**

Servotech expresses its sincere **gratitude to the industry** for the trust and confidence shown over the decades. We look forward to your continued **partnership and patronage** as we innovate further into the future.

Servotech's Promise

At Servotech, our cutting-edge engineering solutions and uncompromising quality standards are designed to help you reduce operational costs and boost overall efficiency. We approach every project with dedication and precision to ensure successful outcomes for our clients. With a proven track record of over 600 projects delivered to 400+ customers across 25+ countries, we bring deep industry expertise and global experience to every assignment. Let Servotech be your trusted partner for your next successful project.

Vision

To develop solutions, To disseminate knowledge network skills and share experience on the world stage.

Mission

We strive to ensure that each goal we achieve offers the opportunity for future improvement, leading to renewed excellence in all our results.

Values

Consistency, determination, transparency and team spirit.





Solvent Extraction Plant

Solvent Extraction Plants are used where oil is extracted from oil seeds like Soya Bean, Sunflower, Cottonseed, Rapeseed, Palm Kernel, Sal seed and other oil seeds and Oil Cakes like Mustard Cake, Cotton Seed Cake, Sunflower Cake, Castor Seed Cake, Ground Nut Cake, Rapeseed Cake and Rice Bran.

- ▶ Preparatory Section
- ▶ Extraction Section
- ▶ Desolventising, Drying and Cooling Section
- ▶ Distillation Section
- ▶ Recuperation Section
- ▶ Meal finishing / Bagging Section
- ▶ Fully Automation
- ▶ Plant Copcity - 100 To 2500 Tonnes Per Doy

Key Features

- ✦ Continuous Operation
- ✦ Low Oil Residue In Exlroded Meal
- ✦ Low Power And Steam Consumption
- ✦ Low Solvent Loss
- ✦ Low Sediment In The Extracted Oil
- ✦ Extractor With Automatic Feeding Function



Desolventiser Toaster Dryer and Cooler (DTDC)

"DTDC" is new concept by SERVOTECH to do Desolventising, Toasting, Drying and Cooling the meal in one single vessel.

Salient Features

De-oiled cake/meal after extraction is to be first desolventised and then the meal is to be cooled to ambient temperature for further processing.

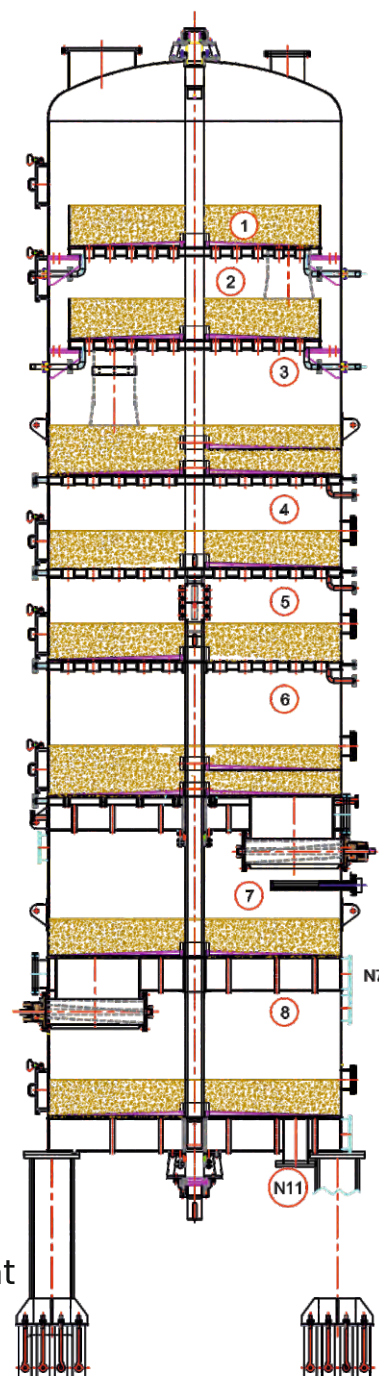
DTDC is used to remove the solvent and dry the DOC to desire quality parameters.

Complete Automation of Servotech - DTDC SERVOTECH can also provide complete automation:

- ✦ To control and maintain temperature
- ✦ Bed height in each compartment
- ✦ Moisture level in DOC.
- ✦ Maintenance of pressure and proper sealing in the last compartment of DT section is ensured by PID control loop to provide high level of safety measures.

Flash Desolventising System (FDS)

Flash Desolventising System "FDS" is the alternative systems for desolventising of the Deoiled Meal. The FDS is require to desolventise the Soya Meal, which is going to be used for human consumption. Its purpose is to prevent protein denaturation heat-treated during conventional desolventising.





Vegetable Refining Oil Plant

Servotech manufactures advanced Vegetable Oil Refining Plants, integrating processes like bleaching, neutralizing, deodorization, and filtration into a compact unit. Using superior distillation deacidification (physical refining) technology, we eliminate the need for acidic treatment while ensuring consistent oil quality. With expertise in high-flow pressure leaf filtration and both batch and continuous refining, we deliver fully customized solutions for clients in India and abroad.

Key Features

Energy-efficient operation

- ✦ Chemical consumption is as little as possible.
- ✦ Automatic loading and continuous operation
- ✦ Deodorizers are used as standard equipment.
- ✦ Plant performance and integration with sophisticated process control systems
- ✦ Ensure that the flow rate is high.
- ✦ For a lower earth cost, wet bleaching is used.
- ✦ Product quality and production are consistent.



Oil / Mill Expeller

We, Servotech oil mill machinery manufacturers in India, have the best technology to refine the oil to its maximum potential; additionally, we provide edible oil processing plants such as

- ▶ Deodorization
- ▶ Oil Bleaching
- ▶ De-waxing
- ▶ Degumming
- ▶ Hydrogenation

We specialize in offering and completing large-scale turnkey projects for oil refining and related processes, in addition to manufacturing plants.

We've been providing the industry with high-quality oil mills for over two decades, and we're known for delivering maximum output in the shortest amount of time.

Key Features

- ✦ Sturdy construction
- ✦ Power usage is lowered.
- ✦ Automatic loading and continuous operation
- ✦ Easy to install and run
- ✦ High rate of productivity
- ✦ Ensure the highest possible level of oil refining
- ✦ Servotech's Promise



Dry Fractionation Plant

We are the leading manufacturers and exporter of Dry Fractionation Plant and our product is made of good quality. Incorporated with the latest technology, the plant is driven by massive increases in palm oil fractionation. The plant has the capability of performing both single and double fractionation. Quite easy to operate, the plants do not require any technical skills to operate. Flexibility in design and operation make the fractionation plant suitable for a wide range of process applications. The technique used in the plant enables good crystallization repeatability and with it, yields high olein of consistent quality.

In summary, dry fractionation plants serve the vital role of separating oils and plant proteins into functional, high-value fractions for a broad spectrum of uses in processed foods, specialty fats, and sustainable ingredient solutions.

Key Features

- ✦ Low operating cost
- ✦ Require less maintenance
- ✦ Consumes less energy
- ✦ Flexible design
- ✦ Automatic in operation with less manual interference



Feed Plant

Cattle Feed Plant & Poultry Feed Plant

Key Features :

- ✦ Easy to install For full control on the plant, all the equipment can be interlocked
- ✦ Requires low maintenance
- ✦ Alarm device are available for complete safety
- ✦ Simple and convenient operation
- ✦ The plant has all the necessary equipment attached to it for mixing, grinding, cooling, pelletizing, lifting, screening, conveying and electric control

Floating Fish Feed Plant

Key Features

- ✦ Robust Construction Hygienic & Durable High Efficiency
- ✦ Smart Operation
- ✦ Customizable Pellet Size
- ✦ Pellet diameter ranges from 0.8 mm to 20 mm.
- ✦ Energy & Cost Efficient
- ✦ Turnkey Support



Lecithin & Lecithin Powder Plant

Lecithin, mainly derived from soybeans, is a natural ingredient rich in emulsifiers, stabilizers, and release agents. We specialize in designing and manufacturing advanced plants for dehydrating wet gums from soybean oil degumming. Our process includes bleaching, dehydration, extraction, purification, and drying, producing pure food-grade lecithin widely used in food, cosmetics, and pharmaceuticals. Our uniquely designed plants ensure gentle drying without burning, require minimal maintenance, and are easy to clean. With proven expertise and efficient techniques, we deliver reliable solutions for high-quality lecithin production.

Key Features:

- ✦ Continuous operation
- ✦ Low oil residue in extracted meal
- ✦ High production flow rate
- ✦ Less consumption of energy
- ✦ Technology based solvent extraction process

Uses:

- ▶ Chocolate and confectionery
- ▶ Instant and/or agglomerated products
- ▶ Fat spreads
- ▶ Frozen dough
- ▶ Pharmaceutical products
- ▶ Bakery and fine pastry
- ▶ Dry bakery products
- ▶ Convenience food (e.g. pizzas, sauces, cereals, noodles, ice cream and bars)
- ▶ Snacks



Instant Tea Extraction Plant

We are the leading manufacturers and exporter of Instant Tea Extraction Plant and our product is made of good quality. The tea extraction plant integrates the process of extraction, separation of waste, evaporation and spray drying. The plants offer a reliable performance at different pressure and temperature conditions and are easy to operate. Available in various specifications, these plants have aroma recovery system which captures the aroma that serves as the essential component in tea.

Manufacturing material: Food grade stainless steel

Key Features:

- ✦ Sturdy frame fabricated from stainless steel
- ✦ Low power consumption
- ✦ Minimum maintenance
- ✦ Aroma recovery system

Process:

- ▶ Tea can be manufactured by extracting the brew from processed leaves, tea wastes or undried fermented leaves.
- ▶ The extract is concentrated under low pressure and dried to a powder by any of the processes including freezing, drying, spray-drying, and vacuum-drying.
- ▶ Low temperatures are used to minimize the loss of flavor and aroma



Acid Oil Plant

The Acid Oil Plant ensure a continuous and automated operation. Manufactured from high grade raw materials, the acid oil plant exhibit excellent resistance against corrosion caused due to concentrated chemicals. The plants are developed with flexible operation modes that make it easy to operate. The plant is designed to reserve various types of acid. We have got all the expertise with us to customize the plant as to suit the requirements of the customers. Our advanced acid oil plant is highly admired for its long service life, easy operation, and less requirement of maintenance.

Process Overview

Soap stock is heated to 90–95°C, then sulfuric acid (12–15% of TFA) is added. The mixture is boiled for 2–3 hours, then settled for six hours to separate into three layers:

Top: Acid oil (collected in storage tank)

Middle: Acidic sludge (sent to sludge tank)

Bottom: Acidic water (treated in equalization tank, then discharged via effluent treatment).

Acidic fumes are neutralized through a water scrubber to prevent corrosion and ensure safe operation



Oleo Chemicals Plant

We have all the techniques available with us that help us in designing and developing an advanced range of Oleo Chemical Plant. The plant requires minimum manual interference with energy efficient operations that are carried out in one go. Manufactured in compliance with the international quality standards, all these plants are constructed out of stainless steel by implementing latest technology. Ensuring a long service life, the oleo chemicals plant is very easy to operate and maintain. In addition to standard models, these plants can be also manufactured in different customized specifications and configurations based upon the requirement of the clients.

Process Description For Continuous Oleo Chemicals Plant

The process involves four main stages:

Pre-treatment: Crude materials are heated and treated with sulfuric acid to remove impurities.

Splitting (Hydrolysis): Continuous process in columns or towers under medium/high pressure, without catalysts.

Distillation: Removes low- and high-boiling substances, improving color and stability of fatty acids.

Fractionation: Final step to obtain pure-quality oleo chemicals.



Castor Oil Derivatives Plant

There are several processes to be followed in castor oil processing like seed crushing, seed cleaning and purification of crushed oil. The crushed oil is purified to get BSS Grade oil that is further used in the production of DCO (Dehydrated Castor Oil), HCO (Hydrogenated Castor Oil) and other value added derivatives like Undecylinic Acid and Heptaldehyde. If the castor oil is deodorized effectively, then, undesirable odors can be completely removed, resulting in the production of medicinal grade castor oil.

Our castor oil plants ensure hygienic extraction along with ease of operation. In these plants, one can achieve better biological value of meal, better desolventisation and more stable moisture. We make sure to use only standard quality of raw materials to manufacture these plants. This imparts sturdiness and resistance to the plant against corrosion, thus, ensuring long service and economical run in the industry. The castor oil plants are completely automatic in their operations and are fully suitable for both medium as well as large scale industrial processing.

Key Features:

- ✦ Easy to operate
- ✦ Specially designed for high flow rate
- ✦ Ensure better desolventisation
- ✦ Convenient to clean
- ✦ Continuous process and fully automatic



Herbal Extraction Plant

Servotech is a trusted manufacturer of Herbal Oil & Spice Extraction Plants in India. Designed with food-grade steel and built to international standards, our plants are widely used in food, spice, and herbal processing sectors. With eco-friendly, solvent-free residues and easy operation & maintenance, they deliver efficiency and quality to herbal oil manufacturers.

Key Feature

- ✦ Built with food-grade steel ensuring hygiene & safety
- ✦ Eco-friendly process with no harmful solvent residues
- ✦ Continuous & batch extractors for flexible operations
- ✦ Simple to operate, easy to maintain with cutting-edge technology
- ✦ Widely used in herbal oils, oleoresins, spices, teas & essential oils



Chilli Extraction Plant

The chilli extraction plant is designed to process chilli (capsicum) pods to produce Paprika oleoresin and chilly powder of desired SHU (Scoville Heat Units) and ASTA (color value). The plant operates continuously, ensuring high efficiency and product consistency.

Key Features

- ✦ Continuous operation for maximum through put
- ✦ Low solvent loss with efficient condensation and recovery systems
- ✦ High extraction efficiency with optimal flake or powder preparation
- ✦ Low oil and pigment residue in spent material
- ✦ Automation grade: Available in Automatic, Semi-Automatic, and Manual configurations
- ✦ Safety standards: All extraction and solvent handling units are designed with flameproof fittings, nitrogen blanketing where required, and stringent temperature and pressure controls.



Ayurvedic Medicine Plant

Customized Solutions for Herbal & Ayurvedic Extraction and Processing

We are specialized in the design, manufacturing, and supply of customized Ayurvedic Medicine Plants tailored to meet the diverse requirements of herbal and traditional medicine manufacturers. With a deep understanding of Ayurvedic principles and modern engineering practices, our plants offer a seamless integration of tradition and technology as per client's requirements and Medicine formulas.

Key Features:

- ✦ **Tailor-Made Design** – Customized for raw materials, product range, and production capacity.
- ✦ **Robust Build Quality** – Made with SS304/SS316, corrosion-resistant, GMP-compliant, and durable.
- ✦ **Easy Operation & Automation** – User-friendly, with options from semi-automatic to PLC/SCADA automation.
- ✦ **Cost-Effective & Energy Efficient** – Optimized for low operational costs, modular for future expansion.



Vanaspati / Hydrogenation Plants

Servotech, a leading hydrogenator manufacturer, provides advanced technology for industrial oil plants with integrated hydrogenation gas systems. Using water electrolysis, hydrogen is generated, compressed, and supplied for vanaspati production. Vanaspati, a cost-effective alternative to ghee, is widely used in cooking and soap manufacturing. We specialize in designing and building high-tech vanaspati facilities, with proven installations including 50-tonne plants in Bihar, 25-tonne plants in Gujarat and Don-E-Salaam, and a 15-tonne plant in Karnataka.

Key Features:

- ✦ There is no hydrogen gas waste, and the catalyst is nickel.
- ✦ Low energy usage
- ✦ Continuous bleaching, neutralization, deodorization, along with post bleaching and post neutralization sections
- ✦ Process conditions have been optimized to ensure adequate selectivity and product consistency.

Process Description For Continuous Vanaspati / Hydrogenation Plants

Hydrogenation raises the melting point of vegetable oils to around 36°C, making them solid at body temperature and extending shelf life. These oils are widely used in snacks, bakery products, and desserts. During the process, unsaturated fatty acids convert into saturated fats, lowering the iodine value and causing the oil to solidify at lower temperatures. Hydrogenation is carried out in pressurized batch tanks with a nickel catalyst. Afterward, the catalyst is recovered and reused through filtration, ensuring no oil loss as hydrogen compensates for any catalyst-related reduction.

